Adopt CHAPTER Env-Ws 1900 to read as follows:

CHAPTER Env-Ws 1900 RULES FOR THE PROTECTION OF INSTREAM FLOW IN DESIGNATED RIVERS

Statutory Authority: RSA 483:9-c,I; RSA 483:11,IV

PART Env-Ws 1901 PURPOSE AND APPLICABILITY

Env-Ws 1901.01 Purpose. The purpose of these rules is to implement procedures for protection of instream flows on designated rivers to maintain water for instream public uses and to protect the resources for which the river or segment is designated.

Env-Ws 1901.02 Applicability. These rules shall apply to water users required to be registered with the department under RSA 482:3 if the water use is:

(a) A consumptive use of water of a designated river;

(b) A consumptive use of groundwater or surface water within 500 feet of the normal high water mark of a designated river, unless the commissioner determines under Env-Ws 1903.04 that there is no hydraulic connection to the designated river; or

(c) A hydroelectric energy facility on a designated river, except:

(1) These rules shall not apply to a hydroelectric energy facility licensed by the Federal Energy Regulatory Commission for the term of the license in effect at the time these rules are adopted, but shall apply upon the expiration of the license.

(2) These rules shall not apply to a hydroelectric energy facility for which a flow requirement has been established as a term or condition of being granted an exemption from the Federal Energy Regulatory Commission licensing process prior to the adoption of these rules, for a period of 25 years from the date the exemption was initially granted or until the facility's existing power purchase contract expires, whichever is earlier.

(3) These rules shall not apply to a hydroelectric energy facility that has registered with the department as a run-of-river facility by sending a letter to the commissioner certifying that:

a. The turbine is located within a dam structure such that there is no other diversion of the water away from the natural stream bed; and

b. The facility is operated in a run-of-river mode such that there is no storage of water for release at a later time.

PART Env-Ws 1902 DEFINITIONS

Env-Ws 1902.01 "Affected water user" means a registered water user subject to these rules.

Env-Ws 1902.02 "Average annual pre-pumping conditions" means the elevation of the water table within the overburden aquifer that would result, in the absence of the stresses imposed by the withdrawal well, given long term average conditions of groundwater recharge and discharge at the well site.

Env-Ws 1902.03 "Average seasonal pumping rate (in gallons per minute)" means the average daily withdrawal (in gallons per day) computed from reported total monthly withdrawals during a specific season over the period-of-record for the withdrawal divided by 1440 minutes per day.

Env-Ws 1902.04 "Basin" means all of the land area contributing to river flow as the river either exits the state or enters the ocean, whichever comes first.

Env-Ws 1902.05 "Commissioner" means the commissioner of the new hampshire department of environmental services.

Env-Ws 1902.06 "Daily withdrawal information" means the volume of water withdrawn on each day of a given season, as reported to the department.

Env-Ws 1902.07 "Department" means the new hampshire department of environmental services.

Env-Ws 1902.08 "Designated river" means any river or river segment that is designated under RSA 483.

Env-Ws 1902.09 "Essential domestic water supply" means the minimum amount of water necessary for conducting essential household functions. Essential household functions are limited to drinking, personal bathing and hygiene, clothes washing, dish washing, toilet flushing, and related essential functions.

Env-Ws 1902.10 "Event" means a continuous sequence of days when orders are in effect.

Env-Ws 1902.11 “Governing body” means the board of selectmen in a town, the board of mayor and aldermen in a city or the council in a city or town with a council, or when used to refer to unincorporated towns and unorganized places, the county commissioners.

Env-Ws 1902.12 “LRMAC” means a local rivers management advisory committee established pursuant to RSA 483:8-a.

Env-Ws 1902.13 “Order” means a notice issued by the commissioner to restrict or cease consumptive water use based on evaluation of average daily streamflow relative to a trigger flow.

Env-Ws 1902.14 “Public water supplier” means a supplier of water as defined in RSA 485:1-a, XVI.

Env-Ws 1902.15 “Registered Water User” means any person or entity subject to Env-Wr 701 based on withdrawals.

Env-Ws 1902.16 “Return Flow" means flow, returned from a withdrawal, to surface water or groundwater within 500 feet of the high water mark of a designated river, unless there is no hydraulic connection between the flow to groundwater and the river.

Env-Ws 1902.17 “RMAC” means the rivers management advisory committee established pursuant to RSA 483:8.

Env-Ws 1902.18 “Season” means any of winter, spring, summer or fall; where winter is from January 1 through March 15; spring is from March 16 through May 31, summer is from June 1 through October 31, and autumn is from November 1 through December 31.

Env-Ws 1902.19 “Standby storage” means finished water stored in day tanks or reservoirs to maintain pressure and volume to a public water supply service area.

Env-Ws 1902.20 “Trigger flow” means one of the seasonal values established for each watershed on a designated river, which is used as a standard for comparison to average daily streamflows when deciding whether to issue an order for that watershed.

Env-Ws 1902.21 “Watershed” means one of the 110 watersheds identified in the document NHDES-COM-MAP-1.

PART Env-Ws 1903 CONSUMPTIVE USE

Env-Ws 1903.01 Consumptive Use. Consumptive use is the difference between the measured withdrawal flow and the measured return flow credited to the withdrawal, on an instantaneous basis.

Env-Ws 1903.02 Return Flow Credited to a Withdrawal.

(a) Return flow credited to a withdrawal shall not be greater than the withdrawal flow.

(b) Measured flow returned at the same time and location as the withdrawal shall be credited to the withdrawal.

(c) Measured return flow to a location other than the withdrawal location shall not be credited to the withdrawal unless the commissioner determines that the withdrawal does not cause adverse impact to instream public uses and the resources for which the river or segment is designated, between the point of the withdrawal and the point of return.

Env-Ws 1903.03 Procedure for Determining No Adverse Impact

(a) Affected water users desiring a determination of no adverse impact under Env-Ws 1903.02(d) shall apply to the commissioner in writing.

(b) The application shall include:

(1) The name, street address, mailing address, and telephone number of the applicant;

(2) The name, mailing address and telephone number of the primary contact person if the applicant is not an individual;

(3) The water use registration number of the applicant;

(4) A report describing:

a. The withdrawal;

b. The return;

c. The reach of river between points 500 feet above the withdrawal location and 500 feet below the return location identifying:

1. Hydrological characteristics;

2. Geological characteristics; and

3. Biological characteristics;

d. The instream public uses and the resources for which the river or segment is designated;

e. The withdrawal rate(s);

f. Frequency and duration of withdrawal flow;

g. The method of measuring withdrawal rates;

h. The return flow rate(s);

i. Frequency and duration of return flow;

j. The method of measuring return flow rates;

k. A written and photographic description of the characteristics and circumstances peculiar to the reach which result in no adverse impact;

l. Monitoring data and study results that support the request; and

m. Habitat requirements for aquatic life in the river reach.

(5) A topographic map of the reach of river between points 500 feet above the withdrawal location and 500 feet below the return location, at a scale of 1:25000 or finer that shows the location of the withdrawal and the return.

(c) Within 60 days of receiving a request, the commissioner shall:

(1) Determine if the withdrawal causes adverse impact between the point of withdrawal and the point of return; and

(2) Notify the applicant of the determination in writing.

(d) The commissioner shall consider the following factors in making the determination:

(1) The instream public uses and the resources for which the river or segment is designated;

(2) The trigger flows established for the river reach;

(3) Public testimony at hearings held under Env-Ws 1907 to establish trigger flows for the river; and

(4) Any other factors which bear on the protection of instream flows in the reach.

(e) When a new water withdrawal is registered under Env-Wr 701 in a reach of river for which the commissioner has made a determination of no adverse impact between the point of withdrawal and the point of return, the commissioner shall:

(1) Notify the applicant of changed conditions within 90 days of the new registration date;

(2) Re-evaluate the determination of no adverse impact taking into account the new withdrawal within 180 days of the date of the new registration; and

(3) Notify the applicant of the results of the re-evaluation within 30 days thereafter.

(f) The use of water for hydroelectric energy production is not a consumptive use.

Env-Ws 1903.04 Procedure for Determining No Hydraulic Connection.

(a) Affected water users having a withdrawal location within 500 feet of a designated river and desiring a determination of no hydraulic connection shall apply to the commissioner in writing.

(b) The application shall include:

(1) The name, street address, mailing address, and telephone number of the applicant;

(2) The name, mailing address, and telephone number of the primary contact person if the applicant is not an individual;

(3) The water use registration number of the applicant;

(4) The location of the withdrawal;

(5) Information that demonstrates that there is no hydraulic connection between the water being withdrawn and the designated river, such as:

a. For an overburden well:

1. Measured elevations, accurate to the nearest tenth of a foot, which demonstrate that the bottom of the screen in the withdrawal well is above the stage of the designated river corresponding to conditions of mean high water; or

2. Stratigraphic logs from 3 or more subsurface borings, one of which is located directly between the withdrawal well and the far bank of the designated river at its closest point to the well, which demonstrate that a continuous impermeable layer exists at an elevation above the top of the well screen and below the bed of the designated river; or

3. Average values of at least 4 sets of 3 or more replicate water level measurements, representing at least 2 consecutive days and 2 or more riverbed piezometers located within the river reach close to the withdrawal and developed to establish a hydraulic connection, which demonstrate that groundwater flow is upward through the riverbed when the well has been pumping at a rate greater than or equal to its average seasonal pumping rate for at least 120-hours; or

4. Any combination of stratigraphic observations and hydraulic measurements from 2 or more subsurface borings located within the river reach close to the withdrawal well which demonstrate that a continuous unsaturated zone exists below the bed of the designated river, when the water level in the well is at average annual pre-pumping conditions; or

5. Water temperature measurements which show that the extreme maximum and minimum values of groundwater temperatures, measured monthly to the nearest tenth of a degree Celsius for one year within the screened interval of the withdrawal well or within an observation well located no more than 10 feet from the withdrawal well at the same elevation, do not differ by more than 3 degrees Celsius; or

b. For a bedrock well:

1. Measured elevations, accurate to the nearest tenth of a foot, which demonstrate that the lower limit of the deepest water-producing bedrock fracture in the withdrawal well is above the stage of the designated river corresponding to conditions of mean high water; or

2. Stratigraphic logs from 3 or more subsurface borings, one of which is located directly between the withdrawal well and the far bank of the

designated river at its closest point to the well, which demonstrate that a continuous impermeable layer exists at an elevation above the bedrock surface and below the bed of the designated river; or

3. Average values of at least 4 sets of 3 or more replicate water level measurements, representing at least 2 consecutive days and 2 or more riverbed piezometers located within the river close to the withdrawal well and developed to establish a hydraulic connection, which demonstrate that groundwater flow is upward through the riverbed, when the well has been pumping at a rate greater than or equal to its average seasonal rate for at least 120-hours and that the water level in the designated river is constant or declining during the period of measurement; or

4. Any combination of stratigraphic observations and hydraulic measurements from 2 or more subsurface borings located within the river reach close to the withdrawal well which demonstrate that a continuous unsaturated zone exists below the bed of the designated river when the local water table in the overburden represents average annual pre-pumping conditions; or

5. Water temperature measurements which show that the extreme maximum and minimum values of groundwater temperatures, measured monthly to the nearest tenth of a degree Celsius for one year in the withdrawal well at the same elevation as the shallowest water-producing bedrock fracture in the withdrawal well, do not differ by more than 3 degrees Celsius; or

c. For a surface water withdrawal:

1. Stratigraphic logs from 3 or more subsurface borings, one of which is located directly between the point of withdrawal and the far bank of the designated river at its closest point to the surface water body from which the withdrawal occurs, which demonstrate that a continuous impermeable layer separates the bed of the surface water body from the bed of the designated river within the reach closest to the surface water body; or

2. Any combination of stratigraphic observations and hydraulic measurements from 2 or more subsurface borings located within the bed of the surface water body from which the withdrawal occurs which demonstrate that a continuous unsaturated zone exists below the bed of the surface water body, when the local water table in the overburden represents average annual pre-withdrawal conditions.

(c) Within 60 days of receiving a request, the commissioner shall:

(1) Determine if the withdrawal is hydraulically connected to the designated river; and

(2) Notify the applicant of the determination in writing.

(d) The commissioner shall consider the following factors in making the determination:

(1) The information submitted by the applicant;

(2) Information in the possession of the commissioner relative to aquifers;

(3) Methods and principles for evaluating hydraulic connection from textbooks and published literature on hydrogeological analysis; and

(4) Any other factors which bear on the hydraulic connection of the withdrawal to the designated river.

PART Env-Ws 1904 MINIMUM RELEASES BY HYDROELECTRIC ENERGY FACILITIES

Env-Ws 1904.01 Maintenance of Flows. Hydroelectric energy facilities subject to these rules shall:

(a) Maintain the established minimum release at all times when inflow is greater than or equal to the established minimum release; and

(b) Maintain outflow equal to inflow when inflow is less than the established minimum release.

PART Env-Ws 1905 CONSUMPTIVE USE LIMITATIONS

Env-Ws 1905.01 Phase-In of Consumptive Use Limitations.

(a) Consumptive use limitations under Env-Ws 1905.03 shall not begin until seven years after the effective date of these rules for affected water users with an exemption from water use limitation orders under Env-Ws 1906.

(b) Consumptive use limitations under Env-Ws 1905.03 shall not begin until four years after the effective date of these rules for affected water users without an exemption from water use limitation orders under Env-Ws 1906.

Env-Ws 1905.02 Trigger Flows and Phases.

(b) The total consumptive use of affected water users shall be limited based on the trigger flows, established pursuant to Env-Ws 1907 for;

(1) A phase I flow;

(2) A phase II flow; and

(3) A phase III flow.

Env-Ws 1905.03 Orders Limiting Consumptive Use.

(a) The commissioner shall issue separate orders limiting consumptive use for each watershed through which the designated river flows.

(b) When estimated average daily flow at the downstream watershed boundary has been less than or equal to the phase I flow for 4 consecutive days, the commissioner shall issue an order which shall:

(1) Apply to all affected water users in the watershed; and

(2) Require affected water users to limit consumptive use so that the instantaneous total consumptive use by all affected water users in the basin shall be not more than 4 percent of the basin phase I flow.

(c) When estimated average daily flow at the downstream watershed boundary has been less than or equal to the phase II flow for 4 consecutive days, the commissioner shall issue an order which shall:

(1) Apply to all affected water users in the watershed; and

(2) Require affected water users to limit consumptive use so that the instantaneous total consumptive use by all affected water users in the basin shall be not more than 2 percent of the basin phase II flow.

(d) When estimated average daily flow at the downstream watershed boundary has been less than or equal to the phase III flow for 4 consecutive days, the commissioner shall issue an order to all affected water users in that watershed requiring them to cease all consumptive uses.

(e) An order shall expire at the end of the tenth day after issuance.

(f) The commissioner shall issue a new order, continuing an event, if the conditions in (b), (c), or (d) occur on the last day of an order.

(g) If, during the period that an order is in effect, estimated average daily flow at the downstream watershed boundary has been greater than or equal to 1.5 times the applicable trigger flow for 4 consecutive days, the commissioner shall issue a notice to all affected water users in that watershed rescinding the order.

(h) If, during the period that an order is in effect, an order requiring more restrictive consumptive use limitations is issued, the more restrictive consumptive use limitations shall apply.

(i) The consumptive use limitation for each affected water user during phase I or phase II orders under (b) or (c) above shall be determined in accordance with Env-Ws 1905.05.

(j) Affected water users shall submit daily withdrawal records for the entire period of the event, within 15 days of the end of the event, which shall include:

(1) Period(s) of withdrawal; and

(2) Rate(s) of withdrawal.

(k) Affected water users with return flow credited to a withdrawal shall submit daily return flow records for the entire period of the event, within 15 days of the end of the event, which shall include:

(1) Period(s) of return flow; and

(2) Rate(s) of return flow.

Env-Ws 1905.04 Public Notification of Orders and Need for Water Conservation. At the beginning of an event, concurrent with the issuance of an order, the commissioner shall:

(a) Make available a press release to a paper that serves each watershed affected by the order notifying the general public about the need for water conservation; and

(b) Issue notification by mail, fax, or electronic mail to all other registered water users in the watershed affected by the order requesting implementation of voluntary water conservation measures; and

(c) Issue notification by mail, fax, or electronic mail to all those individuals and entities listed under Env-Ws 1907.04(c).

Env-Ws 1905.05 Consumptive Use Limitations for Each Affected Water User During Phase I and Phase II Orders.

(a) During phase I orders the consumptive use limitation for each affected water user shall be the lesser of:

(1) The user's proportion of the total normal withdrawal by all affected water users in the basin multiplied by 4% of the basin phase I trigger flow; or

(2) Estimated phase I flow at the user's withdrawal point, less upstream withdrawals at the allowed rate, multiplied by 4%.

(b) During phase II orders the consumptive use limitation for each affected water user shall be the lesser of:

(1) The user's proportion of the total normal withdrawal by all affected water users in the basin multiplied by 2% of the basin phase II trigger flow; or

(2) Estimated phase I flow at the user's withdrawal point, less upstream withdrawals at the allowed rate, multiplied by 2%.

(c) The commissioner shall calculate the consumptive use limitation for each affected water user for each phase and each season every 2 years, beginning 180 days from the effective date of these rules.

Env-Ws 1905.06 Computation of Normal Withdrawal.

(a) The normal withdrawal for an affected water user that has reported water withdrawals under Env-Wr 701 for at least one year prior to the effective date of these rules shall be determined as follows:

(1) For users that do not report complete daily withdrawal information under Env-Wr 701, the normal withdrawal for a season shall be the annual average of that season’s total withdrawals as reported to the commissioner for 5 years or the period of record for that user, whichever is less, divided by the number of days in that season.

(2) For users that report complete daily withdrawal information under Env-Wr 701, the amount of normal withdrawal for a given season shall be the annual average of that season’s total withdrawals, as reported to the commissioner for 5 years or the period of record for that user, whichever is less, divided by the number of days of actual use.

(3) If for any month during the period of record the user did not report the amount of water withdrawn, the lowest reported amount for that month in the period of record shall be used for the month for which actual data is not available.

(b) The normal withdrawal for an affected water user that has reported water withdrawals for less than one year shall be estimated based on the following:

(1) Any reported data by season, together with consideration of whether withdrawal was reduced or ceased during the reporting period in response to an order;

(2) The user's estimate of its average withdrawal for that season;

(3) The number of days of actual withdrawal for that season or the number of days in a season not covered by reported daily withdrawal information;

(4) The type of water use and other operational information, including whether the use is weather-dependent;

(5) Amounts withdrawn by other users of the same type; and

(6) Any other information that is relevant to making the determination.

Env-Ws 1905.07 Operation of Stream Gages by Affected Water Users.

(a) Affected water users that maintain an approved streamflow gage at their withdrawal point may withdraw during an order while streamflow is above the applicable trigger level.

(b) The affected water user shall request approval from the commissioner to establish the streamflow gages for this purpose.

(1) The request shall be in writing.

(2) The request shall identify the location of the proposed gage.

(c) Gages established for this purpose shall be:

(1) constructed and operated consistent with (USGS publications re location and construction).

(2) maintained to provide continuous streamflow measurements

(3) approved by the commissioner.

(d) Withdrawal shall be limited to rates defined by Env-Ws 1905.03 (b) and (c)

(e) Daily stream stage and flow data shall be submitted to the commissioner within 15 days of the end of the event.

Env-Ws 1905.08 Public Water Supply Emergencies.

(a) A public water supply emergency exists that affects public health and safety when:

(1) Water service for essential domestic water supply would be interrupted without an immediate withdrawal; or

(2) Immediate withdrawal is necessary for suppression of a fire in progress.

(b) When a public water supply emergency exists under (a), the person(s) responsible for domestic water supply or fire suppression may withdraw as much water as is necessary to abate the emergency;

(c) Within 7 days after the end of a public water supply emergency under (a) the person responsible for domestic water supply or fire suppression shall notify the commissioner in writing of the withdrawal. Notification shall include:

a. The reasons for the withdrawal;

b. The time(s) of withdrawal;

c. The volume withdrawn;

d. The rate(s) of withdrawal.

(c) A public water supplier may request the commissioner to determine that a public water supply emergency exists which affects public health and safety, in order to maintain water in standby storage for essential domestic water supply or fire protection.

(d) The commissioner shall determine that an emergency exists if:

(1) An emergency withdrawal plan has been approved by the commissioner

(2) The request is in accordance with the approved emergency withdrawal plan.

(e) At least 90 days before the date of the first requested emergency determination for withdrawal to maintain water in standby storage, the person(s) responsible for domestic water

supply or fire protection shall submit an emergency withdrawal plan to the commissioner for approval.

(f) The emergency withdrawal plan shall include:

(1) The name, street address, mailing address, and telephone number of the applicant;

(2) The name, mailing address and telephone number of the primary contact person if the applicant is not an individual;

(3) An engineering report describing operation of the applicant's water system, including:

a. Withdrawal location and capacity;

b. System standby storage capacity;

c. System seasonal storage capacity.

d. Estimates of present and future water demand;

e. Planned and implemented conservation measures; and

f. Planned and implemented provisions for seasonal storage or alternate water supply;

(4) A strategy for developing the capability within 15 years of rule adoption to meet planned water demand for events at the 95% confidence level without emergency determinations.

(5) Measurable milestones for implementation of the strategy, including progress measures and target dates;

(6) A conservation plan which identifies conservation measures, target dates for implementation, and estimated reductions in water use, unless the public water supplier has received an exemption based on water conservation under Env-Ws 1906;

(7) A quantitative description of the conditions for which a public water supply emergency determination is requested, including:

a. Stream flow values;

b. Amount of water in seasonal and standby storage;

c. Stage or elevation of seasonal and standby storage reservoirs;

d. Availability of alternate water supplies; and

e. Water demand;

(8) A detailed description of the conditions under which a public water supply emergency exists; and

(9) A specific request for a rate and duration of withdrawal under the emergency conditions.

(g) Within 15 days of receipt of an emergency withdrawal plan under (f) above, the commissioner shall:

(1) Make the plan available for public review;

(2) Send written notice to and solicit written comment from:

a. Affected water users in the watershed;

b. LRMAC members for the designated river;

c. The governing body of each municipality through or past which the designated river flows;

d. New Hampshire fish & game department;

e. Public utilities commission, if the applicant is a regulated utility;

f. RMAC members;

g. The governor of any state that shares the designated river;

h. United States environmental protection agency;

i. United States fish and wildlife service;

j. United States geological survey.

(h) The commissioner shall allow 30 days for receipt of written comments.

(i) The commissioner shall review the plan, considering the following:

(1) The information in the application;

(2) Written comments;

(3) Other available information;

(4) The minimum withdrawal to maintain public health and safety.

(j) The commissioner shall approve the plan if:

(1) The conditions proposed in (f)(8) and (f)(9) above represent the minimum rate and duration of withdrawal to maintain public health and safety;

(2) The conservation plan in f(6) meets the requirements of Env-Ws 1906; and

(3) The strategy in (f)(4) will meet planned water demand within 15 years of rule adoption at the 95% confidence level for events without the need for emergency determinations.

(k) The commissioner shall notify the applicant and all persons submitting written comment on the emergency withdrawal plan of the approval or denial within 90 days of receipt of the application.

(l) An approved emergency withdrawal plan shall remain in effect for 5 years from the date of the approval.

(m) For every period in which water is withdrawn under a commissioner's public water supply emergency determination, the affected water user shall submit daily water withdrawal records for the entire period of withdrawal under the determination, within 15 days of the date the withdrawal ceases.

Env-Ws 1905.09 Reported Consumptive Use in Excess of Limitations.

(a) If an affected water user fails to submit water use records under Env-Ws 1905.03(i)or (k), or if reported consumptive use exceeds the consumption limits under Env-Ws 1905.03, the commissioner shall:

(1) Notify the affected water user of the failure to report or the exceedance; and

(2) Require submission of a compliance plan within 90 days of notification;

(b) The compliance plan shall include:

(1) The name, street address, mailing address, and telephone number of the affected water user;

(2) The name, mailing address and telephone number of the primary contact person if the affected water user is not an individual:

(3) An engineering report describing operation of the affected water user's consumptive use, including:

a. Withdrawal location and capacity;

b. System standby storage capacity;

c. Estimates of present and future water demand;

d. Planned and implemented conservation measures; and

e. Planned and implemented provisions for seasonal storage or alternate water supply.

(4) A plan for developing the capability within to meet planned water demand at the 95% confidence level for events without exceeding withdrawal limits.

(5) Measurable milestones for implementation of the plan, including progress measures and target dates.

(6) A conservation plan which identifies conservation measures, target dates for implementation, and estimated reductions in water use.

(c) Within 15 days of receipt of a compliance plan under (b) above, the commissioner shall make the plan available for public review, and shall send written notice to and solicit written comment from the following:

(1) Affected water users in the watershed;

(2) LRMAC members for the designated river;

(3) The governing body of each municipality through or past which the designated river flows;

(4) New Hampshire fish & game department;

(5) Public utilities commission, if the applicant is a regulated utility;

(6) RMAC members;

(7) The governor of any state that shares the designated river;

(8) United States environmental protection agency;

(9) United States fish and wildlife service;

(10) United States geological survey

(d) The commissioner shall allow 30 days for receipt of written comments.

(e) After review of the information in the application, written comments, and other available information, the commissioner shall determine the conditions and requirements necessary for the affected water user to comply with required consumptive use limitations.

(f) The commissioner shall notify the affected water user and all persons submitting written comment on the compliance plan of the determination within 90 days of receipt of the application.

PART Env-Ws 1906 EXEMPTION FROM PHASE I AND PHASE II WATER USE LIMITATION ORDERS BASED ON WATER CONSERVATION

Env-Ws 1906.01 Exemptions Based on Water Conservation.

(a) An affected water user may request an exemption from water use limitation orders pursuant to Env-1905.03 (b) and (c) in accordance with the procedures of this section.

(b) An affected water user that is not a public water supplier shall complete an application for an exemption from water use limitations pursuant to paragraph (d) or (g) below.

(c) An affected water user that is a public water supplier shall complete an application for an exemption from water use limitation pursuant to paragraph (e) or (g) below.

(d) For an affected water user that is not a public water supplier, an application for an exemption from water use limitation orders pursuant to Env-1905.03 (a) and (b) based upon the development and implementation of a water conservation plan approved by the commissioner and shall include the following information:

(1) The facility name and address;

(2) Name and telephone number for the owner of the facility;

(3) Name and telephone number for the operator of the facility;

(4) The registered water user identification number that may be subject to restriction orders pursuant to Env-1905.03;

(5) A complete description of all water uses or users at the facility that obtain water from sources subject to Env-1905.03 including:

a. Anticipated demand for water that describes maximum, minimum, and average water withdrawal rates and durations;

b. Factors that control water demand such as consumer choice, delivery contracts, manufacturing runs, seasonal occupancy, and precipitation;

c. Projected growth in the demand for water and a description of the factors that control the growth in demand for water; and

d. A description of how the water is utilized including a description and a percent estimate of the total volume of water used for each applicable process or need;

(6) An evaluation of all water conservation opportunities employed at the facility including:

a. Assessment of changes to historic water demand records;

b. Leak detection and repair activities;

c. Water audits and preventative maintenance programs; and

d. Employee education pertaining to water conservation practices;

(7) A detailed description of past and present water conservation efforts, their shortcomings, effectiveness and cost;

(8) A description of water conservation best management practices or best available technologies applicable to the types of water-using processes at the facility;

(9) A detailed summary of water conservation measures that are planned for implementation during the next 5 years including a quantitative estimate of the water savings associated with these measures;

(10) An economic analysis and calculation of a payback period that factors the true cost of water for implementing the water conservation best management practices or best available technologies listed in subparagraph (8) above, but that are not implemented at the facility;

(11) A detailed summary of any efforts to implement or develop new processes or technologies that may result in additional water conservation opportunities; and

(12) An implementation plan for the water conservation plan that includes:

a. A schedule for the implementation of additional water conservation measures planned pursuant to subparagraph (11); and

b. A description of a process that can be used to monitor and evaluate the results of, and compliance with, the water conservation plan.

(e) For a water user that is a public water supplier, an application for an exemption from water use limitation orders pursuant to Env-1905.03 (a) and (b) based upon the development and implementation of a water conservation plan approved by the commissioner and shall include the following information:

(1) The public water supply system name, identification number and address;

(2) Name and telephone number of the system owner;

(3) Name and telephone number of the system operator;

(4) The registered water user identification number that may be subject to restriction orders pursuant to Env-1905.03;

(5) A complete description of all water users which shall include the average daily water use averaged separately for each meter reading cycle of the system for each of the following water use categories:

a. Single unit residential;

b. Multiple unit residential;

c. Commercial;

d. Industrial;

e. Agriculture;

f. Municipal;

g. Condominiums and apartments;

h. Irrigation;

i. Other;

j. Unaccounted for water which represents the difference between the amount of water delivered to the service area and the amount of water billed; and

k. Total volume of water used by the system which is equal to the sum of water use reported in subclauses a. – i. above.

(6) The residential total gallons per capita per day figures calculated for each system meter reading which are estimated by dividing the amount of water used in a meter reading cycle by the number of days in a meter reading cycle and the estimated number of people served for each meter reading cycle in the last 3 years;

(7) An estimate for the percentage of unaccounted-for water in each of the following categories for each meter reading cycle in the last 3 years:

a. Domestic meter under-registration;

b. Non-domestic meter under registration;

c. Public unmetered use;

d. Process water;

e. Flushing programs;

f. Water main breaks; and

g. Other leakage;

(8) An analysis of all water conservation opportunities currently employed in the water system that includes at a minimum:

a. The promotion of the use of water efficient fixtures or retrofit devices for appliances such as toilets, urinals, showerheads, and faucets;

b. Minimization of water used for landscaping purposes;

c. Providing technical assistance to industrial and commercial water users by providing water audits or other technical assistance measures;

d. Distribution system leak detection and repair programs;

e. Dissemination of information regarding water conservation including:

1. Public education;

2. Customer water use audits; and

3. Water saving demonstrations;

f. Metering of all customers including a meter testing program to recalibrate, repair, and replace meters on a regular basis;

g. Implementation of water rate structures designed to encourage water use efficiency while maintaining sufficient revenues to satisfy fixed costs and rate of return;

h. Offering of incentives to implement water use efficiency techniques, including rebates to customers or others to encourage the installation of water use efficiency measures; and

i. Development and implementation of policies that control outdoor water usage for non-essential purposes such as private auto washing, outdoor landscape and garden watering, and swimming pool filling;

(9) An implementation plan for the water conservation measures not currently utilized, but that are planned that includes:

a. A schedule for the implementation of additional water conservation measures; and

b. A description of a process to monitor and evaluate the results of and compliance with the water conservation plan.

(f) The procedure for submitting a request to the commissioner for an exemption from withdrawal restrictions pursuant to paragraphs (d) or (e) above shall be the following:

(1) The affected water user shall submit a draft version of the water conservation plan prepared in accordance with paragraphs (d) or (e) above;

(2) The affected water user shall solicit comments from the commissioner on the draft water conservation plan developed pursuant to subparagraph (1) above for a period of 60 days; and

(3) The affected water user shall revise the draft water conservation plan based upon comments received pursuant to subparagraph (2) above, and submit a final water conservation plan to the commissioner.

(g) An application for an exemption from water use limitation orders pursuant to Env-1905.03(b) and (c) based upon a production based quantitative analysis of water use that demonstrates that water conservation is currently or will within 5 years of submittal of the water conservation plan achieve a reduction in water use consistent with the water use limitations required pursuant to Env-1905.05 shall contain the following:

(1) The name and address of the facility or water system owner;

(2) Name and telephone number of the system owner;

(3) Name and telephone number of the system operator;

(4) The registered affected water user identification number;

(5) If applicable, the public water supply system identification number;

(6) A description of water conservation measures currently in effect including:

a. The date the water conservation measures were implemented;

b. Documentation of the water volumes utilized and associated facility production volumes prior to and after the implementation of water conservation practices pursuant to paragraph (a) above;

c. A calculation of daily volume of water saved averaged over each season or meter reading cycle as a result of the measures implemented pursuant to paragraph (a), above; and

d. A description of the typical water use processes that are generally used at other similar types of facilities, but are modified, retrofitted, or are not utilized by the affected water user and thus contribute to the calculated water conservation being achieved pursuant to paragraph (c) above;

(7) A description of any additional conservation measures that will be implemented within 5 years of submittal of the application that includes the following information:

a. The scheduled beginning date for the implementation of the additional water conservation measures;

b. The scheduled completion date for the implementation of the additional water conservation measures; and

c. A quantitative and qualitative description of how the water conservation measures, once implemented, will result in a reduction of water usage;

(8) A production based quantitative analysis of water usage that demonstrates that the conservation measures listed in subparagraphs (6) and (7) currently or will limit consumptive use as would be otherwise be required pursuant to Env-1905.03(b) and (c).

(h) The affected water user shall submit to the commissioner the information required pursuant to paragraph (g) to submit a request for an exemption from withdrawal restrictions on a production based quantitative analysis.

(i) The commissioner shall issue an exemption from withdrawal limitations for a period of 5 years when it determines that:

(1) Information submitted pursuant to paragraphs (d), (e), or (f) above, is complete and accurate;

(2) If applicable, the information submitted in accordance with a water conservation plan pursuant to paragraphs (d) and (e), above, indicates the affected water user is currently or planning to implement all logistically, technically and economically feasible water conservation measures as determined by the policies and guidelines of the commissioner or other applicable objectively determined industry standards for water conservation as approved by the commissioner; and

(3) If applicable, the information submitted in accordance with paragraph (h), above, and water use data reported pursuant to Env-Wr 701, indicate that a reduction in monthly water use is occurring at volumes approximately equivalent to the water use limitations that would be issued pursuant to Env-1905.03 (b) and (c).

(j) The commissioner shall deny, revoke, or suspend an exemption from water use limitation if it is determined that:

(1) The information provided in the application for exemption from water use limitation required in paragraphs (d) through (h) is determined to be an inaccurate accounting of actual water usage and water conservation activities;

(2) The information provided in the application for exemption from water use limitation does not verify compliance with the water conservation requirements of this section;

(3) The affected water user fails to implement conservation measures in accordance with the schedule provided in the application pursuant to paragraphs (d), (e), or (f) above; or

(4) Water use reduction is not occurring as indicated in the application prepared in accordance with paragraph (g), above.

(k) The commissioner shall verify compliance with the requirements of an exemption from withdrawal limitations by:

(1) Reviewing monitoring reports developed pursuant to subparagraphs (d)(12) or (e)(9)a. above; and

(2) By conducting a minimum of 2 scheduled on-site audits during the period that each exemption from withdrawal is issued pursuant paragraph (i) above.

(l) If any of the information requested pursuant to paragraphs (d) or (f) can not be provided due to trade secrets associated with a process at the facility, the affected water user shall obtain an exemption from the commissioner pursuant to subparagraphs (1) through (4) below:

(1) In order to request an exemption from providing the information required pursuant to paragraph (d) or (f), the affected water shall:

a. State the reason(s) why the waiver is being sought; and

b. Propose a method of compliance with the intent of paragraphs (d) or (f);

(2) The commissioner shall approve the request for an exemption when it can be determined, based upon the information submitted, whether the requested modification will result in compliance with the intent of paragraphs (d) or (f), above;

(3) The commissioner shall deny the request for an exemption when it can't be determined based upon the information submitted that the requested modification will result in compliance with the intent of paragraphs (d) or (f), above; and

(4) The commissioner shall send written notice of his decision to the water user with the specific findings on which the decision was made.

(m) The affected water user is required to apply for renewal of the water use limitation exemption request 90 days prior to the expiration by re-applying for an exemption pursuant to the requirements of paragraphs (a)-(l).

Env-Ws 1906.02 Renewal of Exemptions.

(a) Affected water users receiving an exemption under Env-Ws 1906.01 shall report annually to the commissioner on the effectiveness of implementation of the water conservation plan in reducing water use by at least as much as the reductions that would have been required under Env-Ws 1905.03 (a), 1905.03(c) and/or 1905.03 (d).

(b) Failure to meet the reporting requirement in (a) shall nullify the exemption, resulting in the affected user being subject to orders issued under Env-Ws 1905.03 (b) or (c), or both.

(c) Failure to report water use to the commissioner as required by Env-Ws 701 shall nullify the exemption, resulting in the affected user being subject to orders issued under Env-Ws 1905.03 (b) or (c), or both.

(d) The commissioner shall review the justification for the exemption at the end of the 5 year period. This review shall be based on an analysis of the water use reports and annual reports on effectiveness of implementation of the water conservation plan submitted to the commissioner by the water user. As a result of the review, the commissioner shall:

(1) Renew the exemption for an additional 5 years if the review shows that implementation of the water conservation plan has been effective in reducing water use by at least as much as the reductions that would have been required under Env-Ws 1905.03 (b) or (c), or both; or

(2) Not renew the exemption if the review shows that implementation of the water conservation plan has not been effective in reducing water use by at least as much as the reductions that would have been required under Env-Ws 1905.03 (b) or (c), or both.

(e) If the exemption is not renewed, the water user shall be subject to reduction orders issued pursuant to Env-Ws 1905.03 until such time as the water user can demonstrate effectiveness of implementation of a water conservation program for at least 2 years, at which

time the water user may again request an exemption from the reduction orders in accordance with this section.

PART Env-Ws 1907 PROCESS FOR ESTABLISHING TRIGGER FLOWS AND MINIMUM RELEASES

Env-Ws 1907.01 Trigger Flows and Minimum Releases.

(a) The commissioner shall establish trigger flows at the downstream watershed boundary of each watershed through which a designated river flows.

(b) The commissioner shall establish minimum releases for each hydroelectric energy facility subject to these rules.

Env-Ws 1907.02 Schedule for Hearings to Establish Trigger Flows and Minimum Releases.

(a) For any river or river segment that is designated pursuant to RSA 483 as of the effective date of these rules, the commissioner shall hold a hearing in accordance with Env-Ws 1907.04 concerning the trigger flows and required minimum releases proposed pursuant to this part within 270 days of the effective date of these rules.

(b) For any river or river segment that is designated pursuant to RSA 483 after the effective date of these rules, the commissioner shall hold a hearing in accordance with Env-Ws 1907.04 concerning the trigger flows and required minimum releases proposed pursuant to this part within 180 days of the effective date of the designation.

Env-Ws 1907.03 Proposed Trigger Flows and Minimum Releases.

(a) The commissioner has determined, subject to additional information received during public comment, that the following proposed trigger flows and minimum releases are sufficient to maintain water for instream public uses and to protect the resources for which the river or segment is designated:

(1) The proposed phase I flow shall be the seasonal average daily river flow which is equaled or exceeded 60 percent of the time (also known as Q60).

(2) The proposed phase II flow shall be the seasonal average daily river flow which is equaled or exceeded 80 percent of the time (also known as Q80).

(3) The proposed phase III flow shall be the seasonal average daily river flow which is equaled or exceeded 90 percent of the time (also known as Q90).

(4) The proposed minimum release(s) from a hydroelectric energy facility subject to these rules shall be determined by applying the Interim Regional Policy for New England Stream Flow Recommendations, U.S. Fish and Wildlife Service, February 13, 1981.

(b) The proposed trigger flows and minimum releases shall be set forth in writing and shall be made available for public review at least 30 days before the public hearing required under Env-Ws 1907.04.

Env-Ws 1907.04 Hearing and Opportunity for Public Comment on Proposed Trigger Flows and Required Minimum Releases.

(a) For each designated river or segment, the commissioner, in cooperation with the LRMAC, shall hold a public hearing in a community through or past which the designated river flows to receive comment on the following factors as they pertain to the proposed trigger flows and required minimum releases:

(1) All factors identified in RSA 483, including considerations identified in RSA 483:1, RSA 483:6, IV(a), and RSA 483:9-c;

(2) Flows established pursuant to existing federal licensing processes or state contracts;

(3) Whether there are wastewater discharges that require a certain instream flow for permit compliance or maintaining water quality standards;

(4) Whether the river contains flow-regulating structures such as dams, and if so, how such structures are used to manage flow;

(5) Information relevant to flow conditions that are likely to stress existing aquatic life or habitat, or both, beyond the ability of the natural system to adjust to changing flows without permanent adverse impacts;

(6) Information relevant to flow conditions that are likely to impair recreational uses;

(7) Information relevant to flow conditions that are likely to adversely affect resources for which the river is designated;

(8) Stream gaging data and watershed characteristics; and

(9) Pertinent resource management plans including fisheries management plans, watershed management plans, and recreation management plans;

(10) Other information relevant to the proposed trigger flows and required minimum releases.

(b) At least 30 days before the hearing, the commissioner shall issue a notice of the hearing in a newspaper of local circulation.

(c) At least 30 days before the hearing, the commissioner shall send written notice of the public hearing to and solicit comment from the following:

(1) Affected water users in the watershed;

(2) Federal energy regulatory commission, for each designated river with a licensed hydropower site;

(3) LRMAC members for the designated river;

(4) The governing body of each municipality through or past which the designated river flows;

(5) National park service;

(6) New Hampshire department of justice;

(7) Public utilities commission;

(8) RMAC members;

(9) The governor of any state which shares a designated river;

(10) United States environmental protection agency;

(11) United States fish and wildlife service;

(12) United States forest service, for each designated river inside the white mountain national forest; and

(13) United States geological survey.

(d) At the public hearing, the commissioner shall specify a comment period which shall close at least 30 days after the hearing date, during which time the commissioner will receive

written comments on the factors pertaining to the proposed trigger flows and required minimum releases.

Env-Ws 1907.05 Establishment of Trigger Flows and Required Minimum Releases.

(a) Within 60 days of the close of the public comment period, the commissioner shall issue a decision establishing the trigger flows and required minimum releases for the designated river.

(b) The commissioner's decision shall:

(1) Be in writing;

(2) State the basis for the established flow(s);

(3) Include the assessment required by RSA 483:9-c, III;

(4) Include a summary of comments received; and

(5) Include an explanation of how the comments affected the established flows.

(c) The commissioner shall send copies of the decision to:

(1) All persons identified in Env-Ws 1907.05(c); and

(2) Persons who submitted written comments on the proposed flows and who requested to receive a copy of the notice of the established flows.

Env-Ws 1907.06 Reconsideration of an Established Trigger Flow or Required Minimum Release.

(a) A person may file a petition with the commissioner to request reconsideration of an established trigger flow or minimum release.

(b) If the petition is filed within 30 days of the date the decision is issued, the implementation of the decision will be stayed until the commissioner has acted on the petition, in accordance with RSA 483:9-c, VI.

(c) The petition shall be in writing.

(d) The petition shall include:

(1) The name, address and daytime telephone number of the person requesting reconsideration;

(2) If the person requesting reconsideration is not an individual, the name of an individual who can be contacted on behalf of the organization requesting the reconsideration;

(3) The specific change being sought in a trigger flow or required minimum release;

(4) An explanation of how the flow that the commissioner established will adversely affect one or more of the resources for which a particular river or segment was designated by the general court under RSA 483;

(5) The factors identified in RSA 483:1, RSA 483:6, IV(a), and RSA 483:9-c;

(6) If applicable, the specific error(s) committed by the commissioner in evaluating the factors identified pursuant to (2) and (3) above;

(7) Data not available or considered at the time the protected instream flow was set.

(e) Within 30 days of receiving a petition for reconsideration, the commissioner shall:

(1) Deny the request and affirm the established trigger flow or required minimum release; or

(2) Grant the request and reconsider the trigger flow or required minimum release.

(e) If the commissioner believes that an oral hearing would facilitate making a decision to deny or grant the request, the commissioner shall:

(1) Schedule a hearing;

(2) Notify the petitioner of the date, time and place of the hearing.

(f) Any hearing so scheduled shall be conducted in accordance with RSA 541-A and Env-C 200.

(g) If the commissioner denies the request, the commissioner shall:

(1) Notify the petitioner in writing of the denial;

(2) State the reason(s) for the denial.

(h) If the commissioner grants the request, the commissioner shall:

(1) Notify the petitioner in writing that the established trigger flow or required minimum release will be reconsidered;

(2) Initiate hearing and opportunity for public comment on the proposed new trigger flow or required minimum release by the process described in Env-Ws 1907.04(a)-(c);

(i) As specified in RSA 483:9-c, VI, the commissioner's decision on the request may be appealed in accordance with RSA 541.

(j) The commissioner shall initiate action to reconsider a trigger flow or required minimum release by the process described in Env-Ws 1907.04(a)-(c) if changed conditions in the watershed that warrant re-evaluation of the flows.

PART Env-Ws 1908 WAIVERS

Env-Ws 1908.01 Waivers

(a) The rules contained in this part are intended to apply to a variety of conditions and circumstances. It is recognized that strict compliance with all rules prescribed herein might not fit every conceivable situation. Affected persons may request a waiver of specific rules outlined in this part in accordance with paragraph (b) below.

(b) All requests for waivers shall:

(1) Be submitted in writing to the commissioner; and

(2) Include the following information:

a. A description of the designated river and water use, instream public use or resource to which the waiver request relates;

b. A specific reference to the section of the rule for which a waiver is being sought;

c. A full explanation of why a waiver is necessary and demonstration of the affect caused if the rule is adhered to;

d. A full explanation of the alternatives for which a waiver is sought with supporting data; and

e. A full explanation of how the alternatives for which a waiver is sought are consistent with the intent of RSA 483:9-c, would have a just result, and would adequately protect human health and the environment.

(c) The commissioner shall grant a waiver if it finds that the alternatives proposed are at least equivalent to the requirements contained in this part, and are adequate to ensure that the provisions of RSA 483:9-c are met.

(d) The commissioner shall not grant any waiver that in its judgment contravenes the intent of any rule.

(e) The commissioner shall issue a written response to a request for a waiver.

(f) If the waiver is denied, the denial shall specifically set forth the reason(s) for the denial.

(g) The commissioner shall grant a waiver for a specific time period not to exceed 10 years.